

CLAIMS

What is claimed is:

- 1 1. An electronically-enabled encasement for a handheld computer, the
2 encasement comprising:
 - 3 an encasement portion configured to cover at least a portion of the handheld
4 computer, including a front surface of the handheld computer providing access to a
5 display;
 - 6 a spine engageable with an accessory slot of the handheld computer to
7 detachably couple the encasement with the handheld computer; and
 - 8 at least one electronic component embedded in the encasement portion.
- 1 2. The encasement of claim 1, wherein the spine is slideably engageable with
2 an accessory slot of the handheld computer, the encasement portion being
3 dimensioned to encase the handheld computer when the spine is engaged to the
4 handheld computer.
- 1 3. The encasement of claim 1, further comprising a connector capable of
2 mating with a serial connector of the handheld computer to allow communication
3 between the electronic component and the handheld computer.
- 1 4. The encasement of claim 1, wherein the connector is selected from the group
2 consisting of a wiping-style connector, a pogo-style connector and a dual style
3 connector.

4 5. The encasement of claim 3, further comprising circuitry in the encasement
5 that connects the connector to the electronic component of the handheld computer.

1 6. The encasement of claim 1, wherein the encasement portion comprises a
2 front portion that is extendable over the display surface of the handheld computer,
3 and a back portion that is extendable over the back surface of the handheld
4 computer.

1 7. The encasement of claim 6, further comprising a joint to movably couple the
2 front portion to the back portion.

1 8. The encasement of claim 6, wherein the joint is formed from a flexible
2 material.

1 9. The encasement of claim 8, wherein the flexible material enables the front
2 portion to wrap around and allow the exterior surface of the front portion to contact
3 an exterior surface of the back portion.

1 10. The encasement of claim 9, wherein the joint is a wrap-around hinge that
2 enables the front portion to wrap around the back portion.

1 11. The encasement of claim 6, wherein the electronic component is embedded
2 in the front portion of the encasement portion.

1 12. The encasement of claim 11, wherein the encasement further comprises a
2 connector that is embedded in the back portion of the encasement and is capable of
3 mating with a serial connector of the handheld computer to extend communication
4 of the handheld computer to the electronic component.

1 13. The encasement of claim 12, further comprising a second connector
2 accessible from a back surface of the back portion of the encasement to mate with
3 another connector of an accessory device.

1 14. The encasement of claim 13, wherein the second connector enables the
2 handheld computer to synchronize with another computer when the encasement is
3 coupled to the handheld computer.

1 15. The encasement of claim 14, further comprising a processor capable of
2 executing synchronization functions.

1 16. The encasement of claim 12, further comprising a locking mechanism, the
2 locking mechanism coupling the back portion of the encasement portion with the
3 handheld computer to secure stable mating between the connector in the encasement
4 and the serial connector of the handheld computer.

1 17. The encasement of claim 6, further comprising a mechanical coupling that
2 enables the front portion and the back portion to be retained in a closed position.

1 18. The encasement of claim 17, wherein the mechanical coupling is a male
2 velcro element positioned on the front or the back portion and a female velcro
3 element positioned on the other of the front and the back portions.

1 19. The encasement of claim 1, wherein the electronic component is selected
2 from the group consisting of wireless modem, voice recorder, digital camera,
3 keyboard, cell phone, solar cell, rechargeable battery, GPS system, recharger,

4 memory, connector for multi-media cards, memory stick, accessory cartridge,
5 compact flash card and phone card.

6 20. The encasement of claim 1, further comprising one or more batteries.

1 21. The encasement of claim 1, wherein the encasement includes a radio
2 frequency communication component.

1 22. The encasement of claim 21, wherein the radio frequency communication
2 component is adapted to operate in a Bluetooth medium.

1 23. The encasement of claim 21, further comprising an RF antenna.

1 24. The encasement of claim 1, wherein the encasement includes memory.

1 25. The encasement of claim 24, wherein the memory stores information for the
2 handheld computer.

1 26. An electronically-enabled encasement for a handheld computer, the
2 encasement comprising:

3 an encasement portion configured to at least a portion of the handheld
4 computer, including a front surface of the handheld computer providing access to a
5 display and a back surface;

6 a spine engageable with an accessory slot of the handheld computer to
7 detachably couple the encasement with the handheld computer;

8 a radio frequency mechanism integrated into the encasement portion; and

- 9 an electrical coupling that extends communication between the radio
- 10 frequency mechanism and the handheld computer.

2020-05-22 10:43:52

27
1 40. A method for attaching electronic peripherals to a handheld computer,
2 comprising:
3 providing an encasement which comprises
4 an encasement portion configured to at least a portion of the handheld
5 computer, including a front surface of the handheld computer providing access to a
6 display and a back surface,
7 a spine slidably engageable with an accessory slot of the handheld computer
8 to detachably couple the encasement with the handheld computer,
9 an RF antenna embedded in the encasement portion,
10 a plurality of electronic peripherals embedded in the encasement portion, and
11 a connector that extends communication of the electronic component to the
12 handheld computer; and
13 sliding the spine into an accessory slot of the handheld computer.